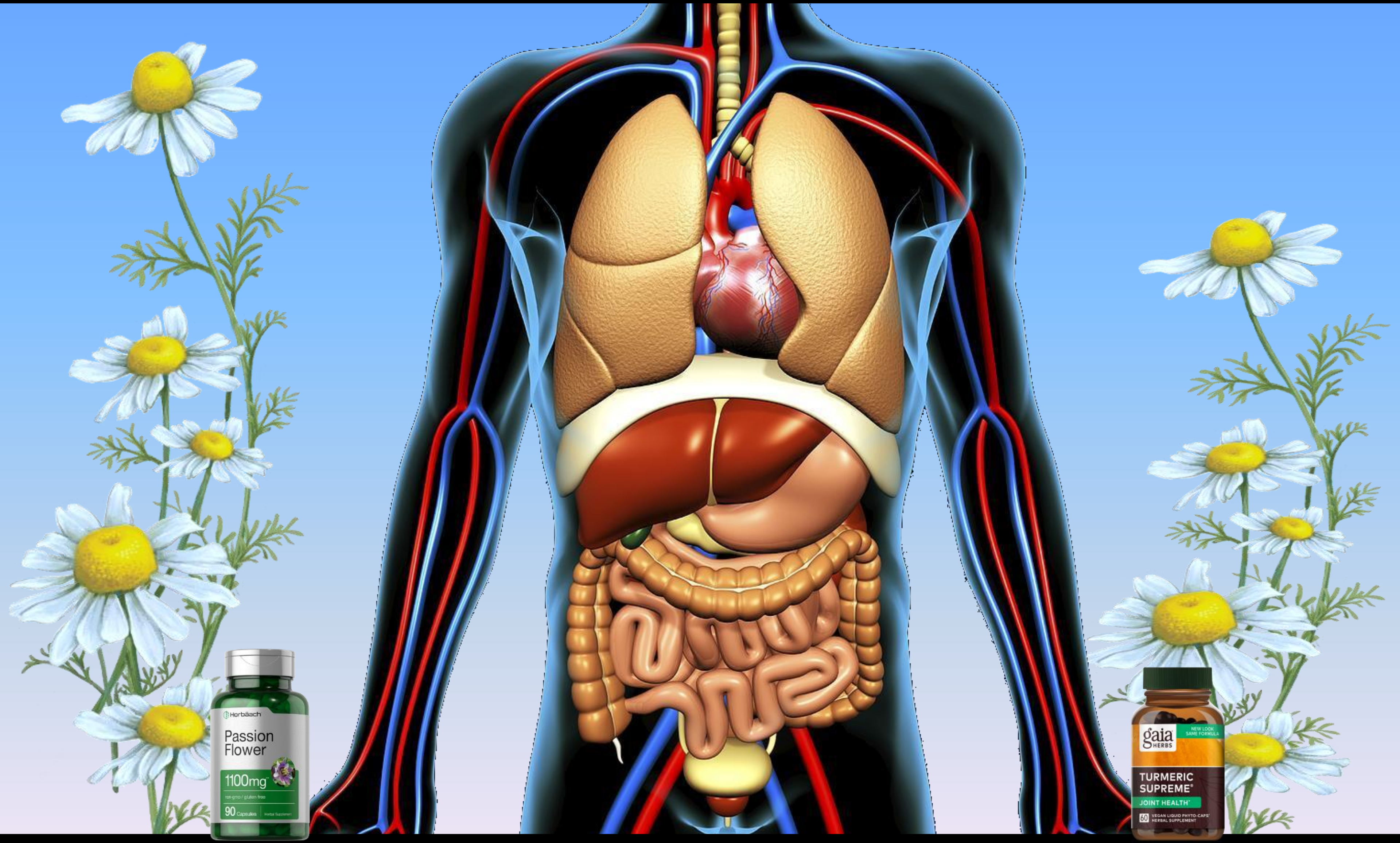
Phytotherapy (Code 3274)

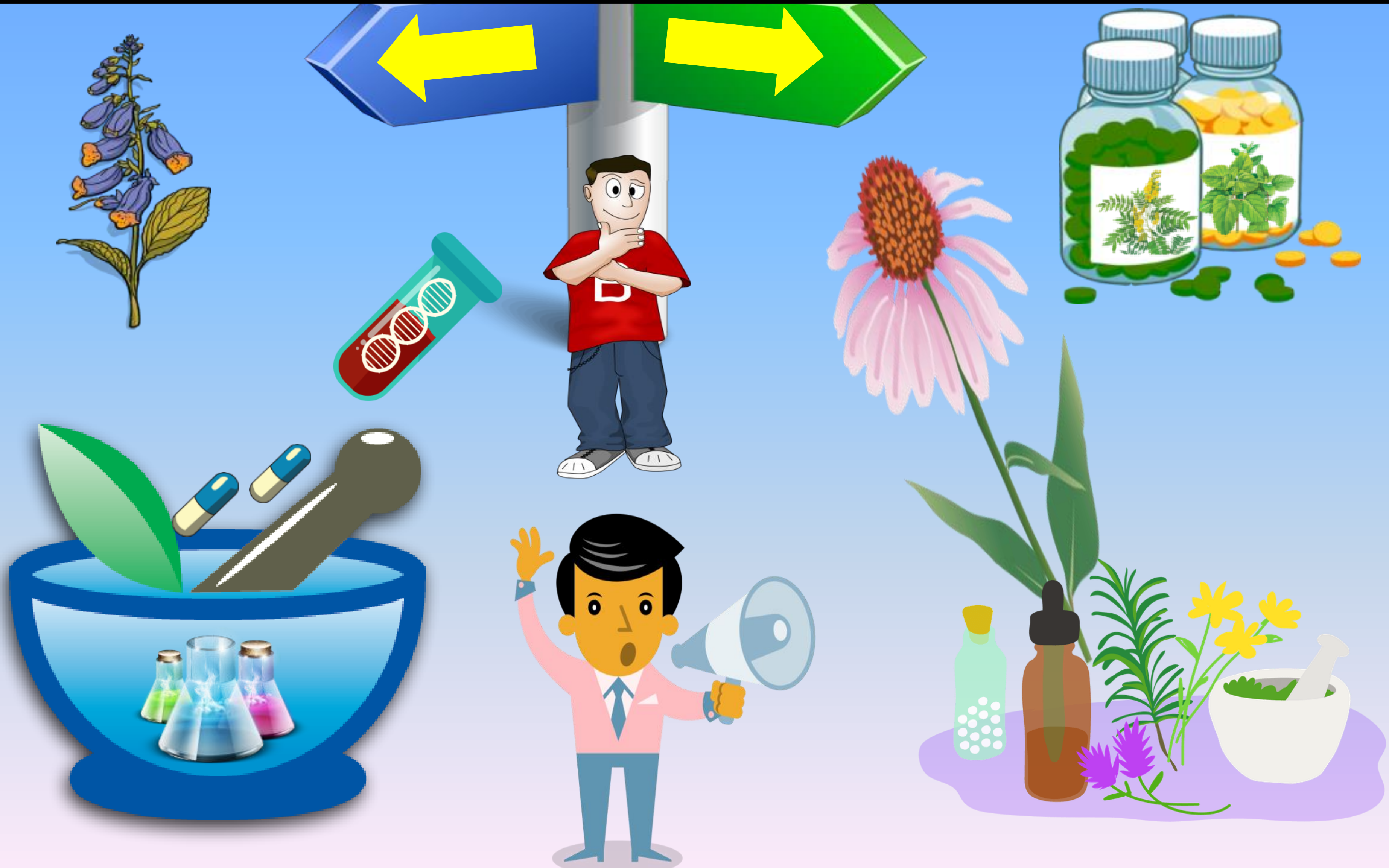
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Prof. Dr. Omar M. Sabry

Orientation Phytotherapy (Code 3274)

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Orientation Phytotherapy (Code 3274)



Orientation Phytotherapy (Code 3274)

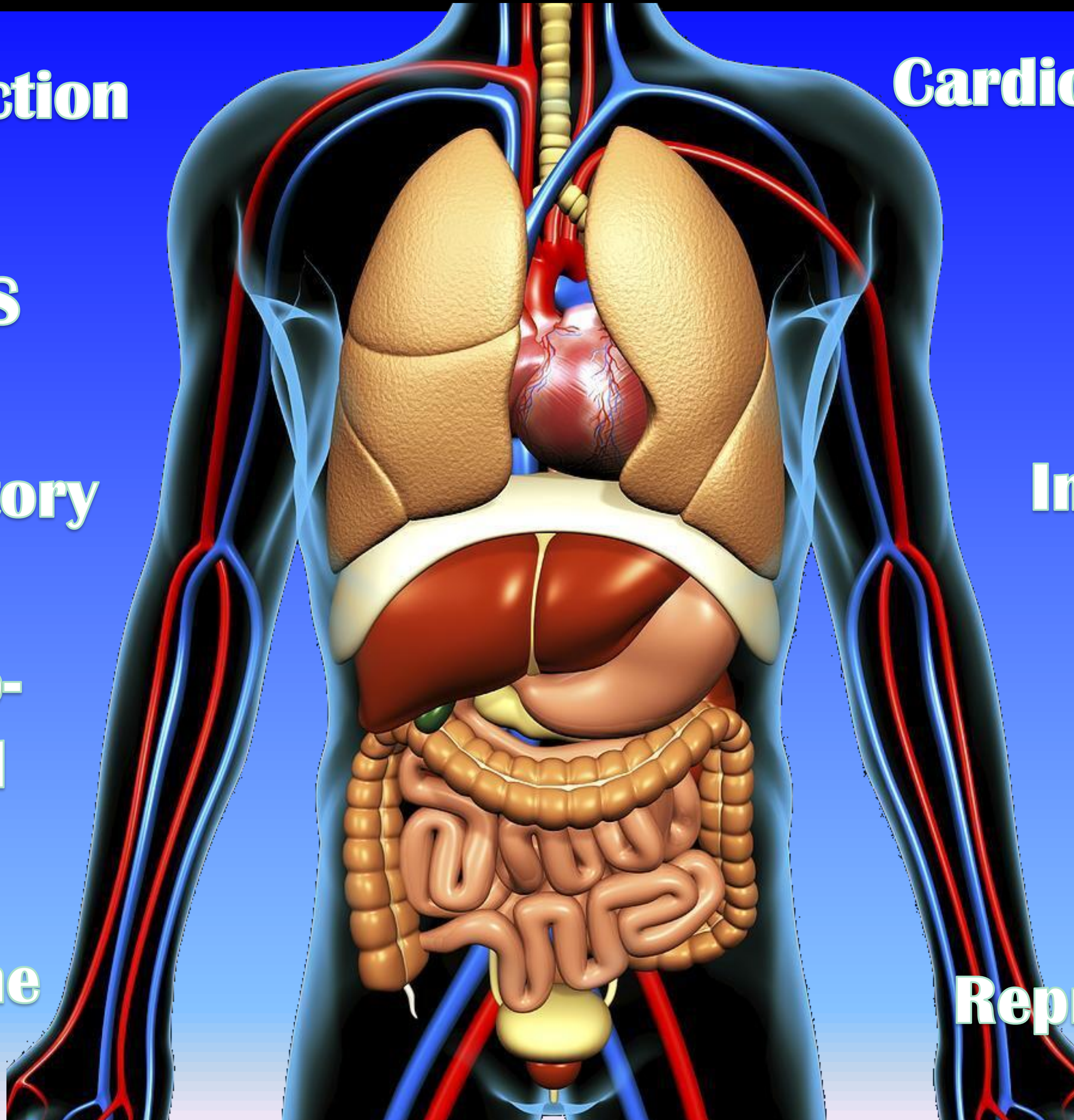
Introduction

CNS

Respiratory

Musculo-
Skeletal

Endocrine



Cardiovascular

Skin

Immunity

GIT

Urinary
Reproductive

Orientation Phytotherapy (Code 3274)





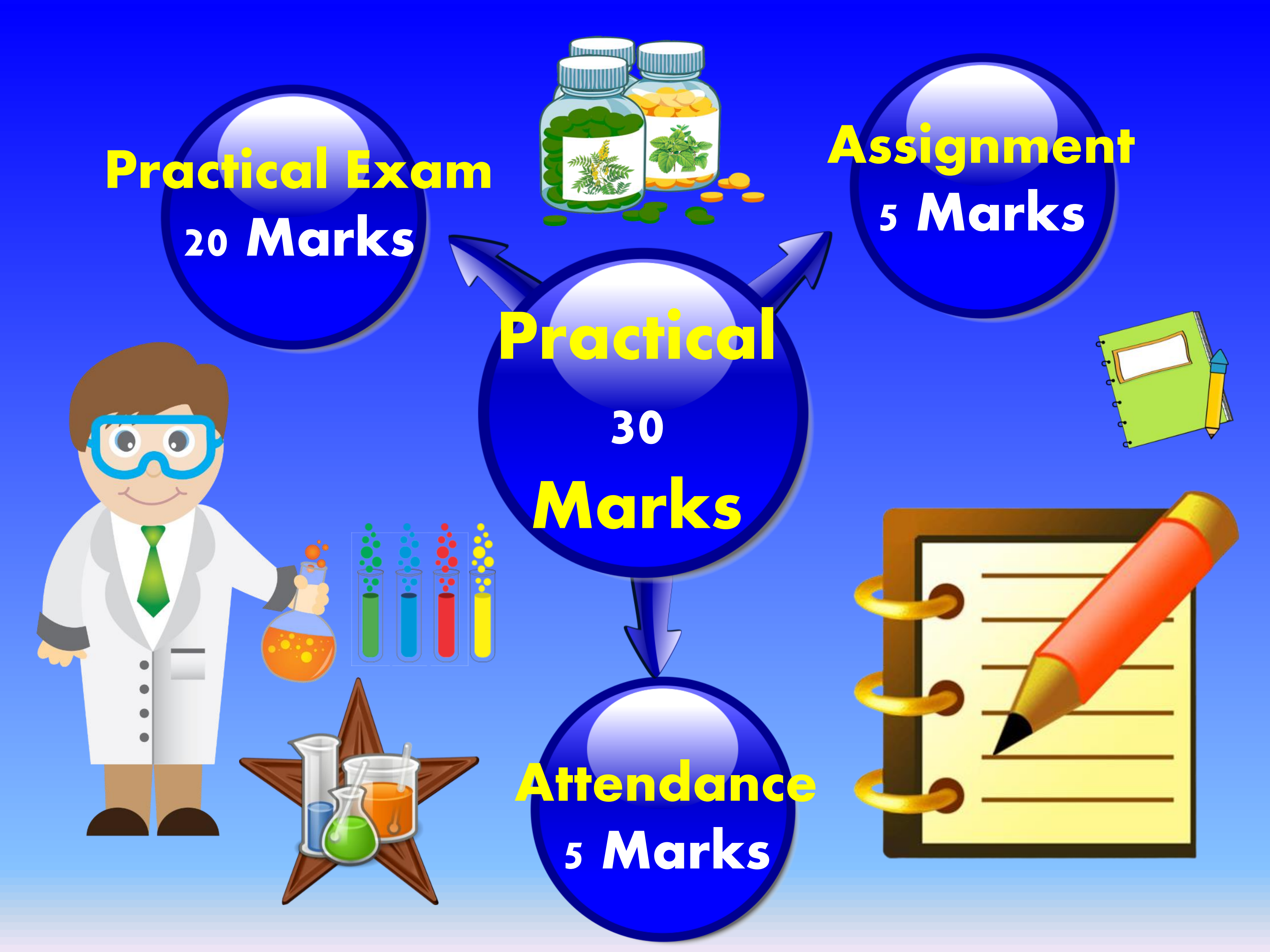
Phytotherapy
100 Marks





Practical
30 Marks

Theoretical
70 Marks


Practical
30
Marks
Practical Exam
20 Marks
Assignment
5 Marks
Attendance
5 Marks

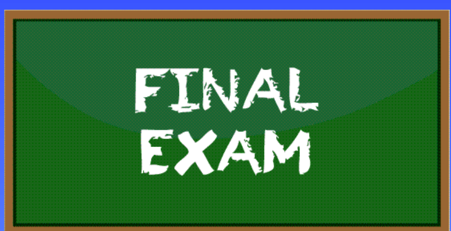
Orientation Phytotherapy (Code 3274)

Theoretical
70
Marks

Final Exam
50 Marks

Quizzes
10 Marks

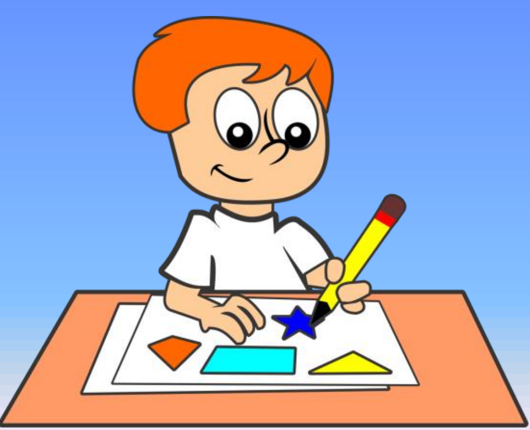
Midterm
10 Marks







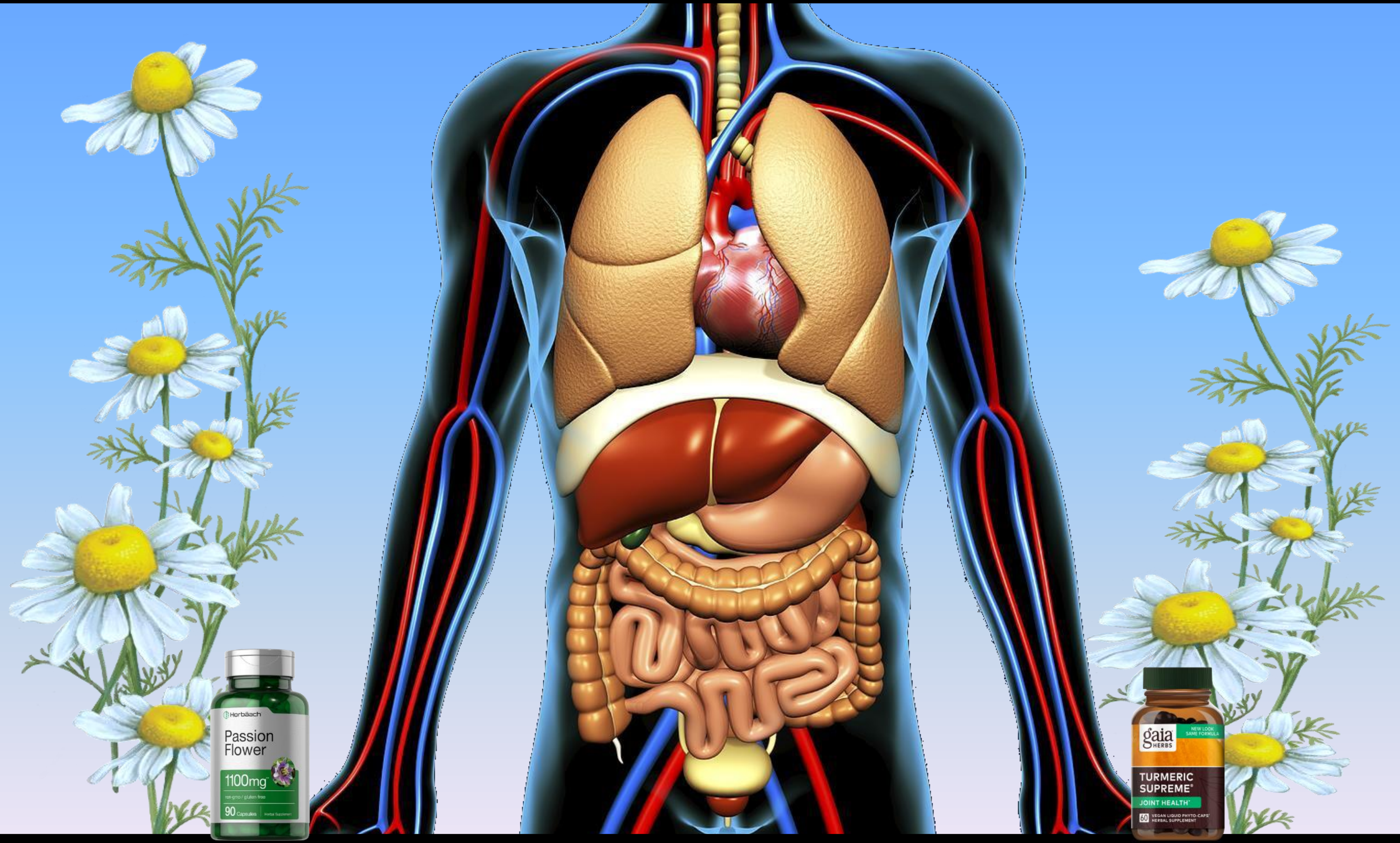






Phytotherapy (Code 3274)

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Prof. Dr. Omar M. Sabry

Introduction

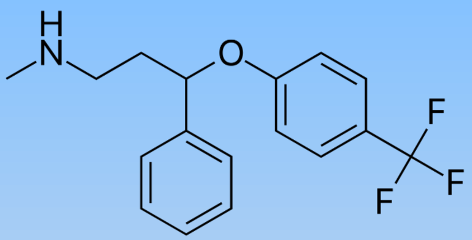
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Introduction

Conventional Drugs {Western}

- ❑ Pure single compound or 2 or more
- ❑ With side effects
- ❑ One pharmacological activity
- ❑ Prozac as an Anti-depressant



Fluoxetine

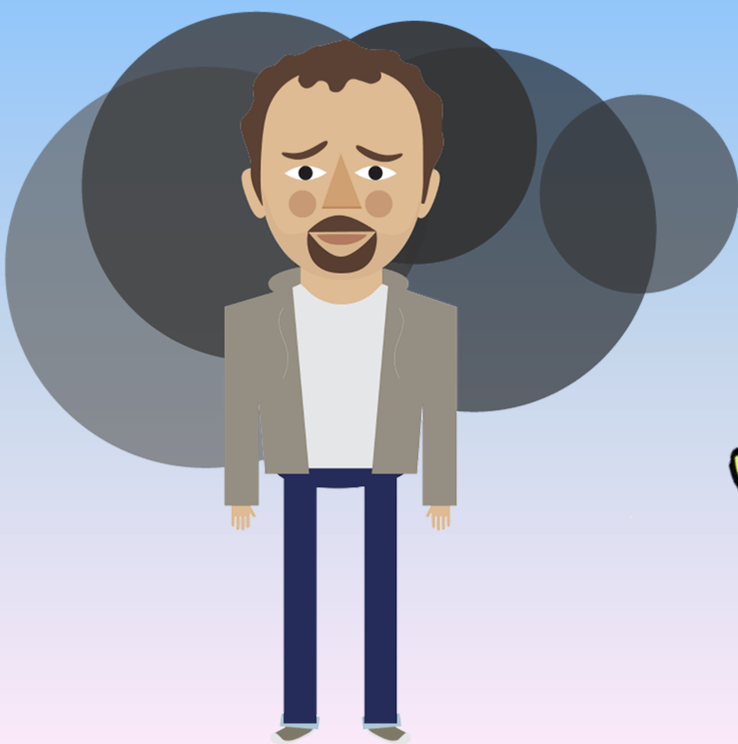




Introduction

Complementary Medicine {CM}

- ❑ Used along with conventional medicine e.g. Herbal Medicine









Introduction

Alternative Medicine {AM}



- ❑ **Homeopathy** {like cures like}
  Au for Depression
  Ephedra for anxiety

Very dilute



- ❑ **Aromatherapy** {Treatment with volatile oils}







- ❑ **TCM** {Acupuncture}

Introduction

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Herbal Medicine

- ❑ **Traditional Herbal Medicine**
- ❑ **Phytotherapy**











Introduction

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Integrative Medicine



Introduction

Biogenic Drugs

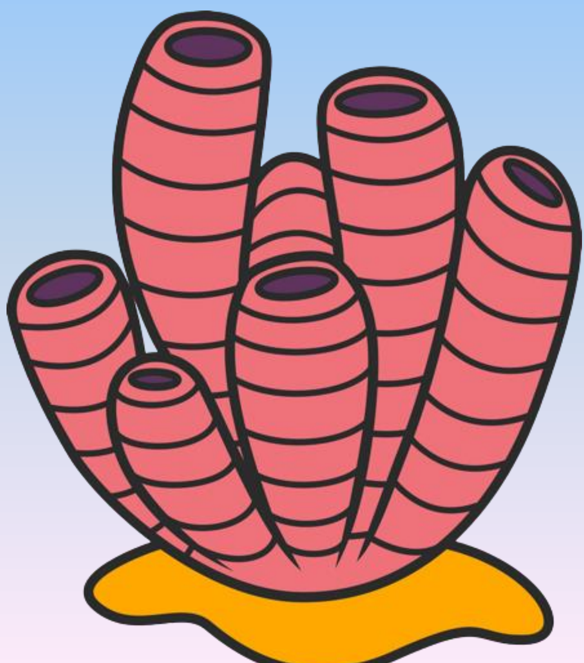
- Drugs from biological origin

Medicinal Plant





Sponge



Introduction

Scope of Phytotherapy

- ❑ **Mild conditions**
  Fever

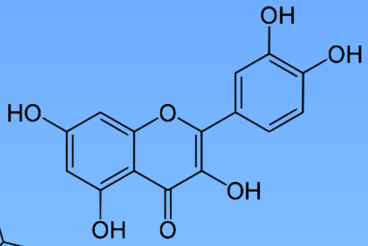


- ❑ **Not severe conditions**
  Coma



Introduction

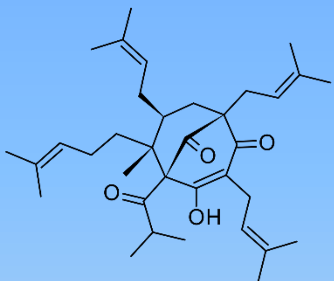
Herbal Drugs



Quercetin

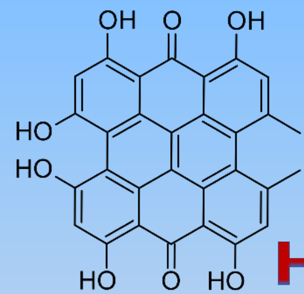


- ❑ Complex mixture



- ❑ Lower side effects

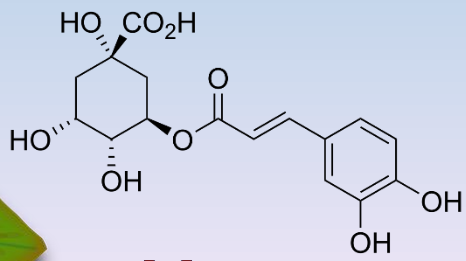
Hyperforin



Hypericin

- ❑ More than one pharmacological activity
- ❑ St. John's wort



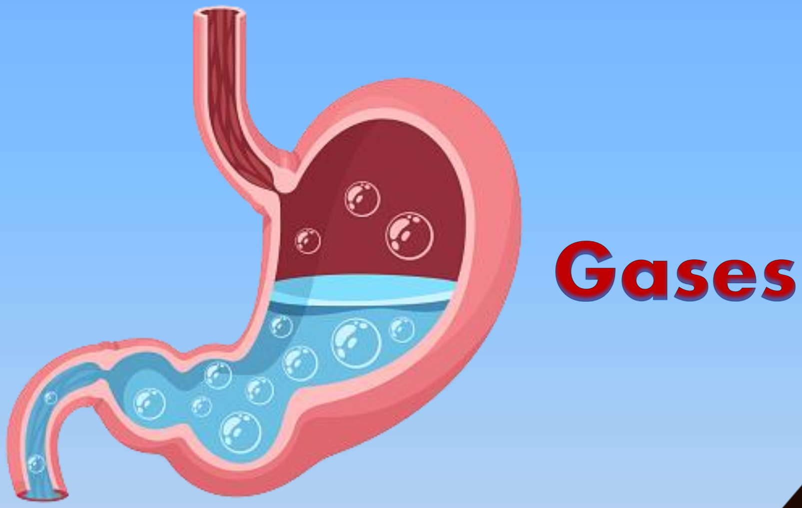


Chlorogenic acid

Introduction

Return to Phytotherapy

- ❑ Low side effects
- ❑ Cheap price









Introduction

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Components of Herbal Tea

- ❑ **Basic ingredient**
  Chaste Berries
- ❑ **Adjuvant**
  Chamomile
- ❑ **Excipient**
- ❑ **Corrigents**
  {Mask unpleasant taste}









Introduction

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Classification of Herbal Drugs
Potency - Toxicity



- **Highly potent {Digitalis - Aconite}**
- **Intermediately potent {Ephedra - Datura}**
- **Mildly potent {Chamomile}**





Introduction

Herbal Dosage Forms



- ❑ **Oral Dosage Forms**
- ❑ **Liquids**

  Syrup – Suspension – Emulsion – Decoction - Infusion

- ❑ **Solids**

  Capsules – Tablets – Powders

- ❑ **Teas**

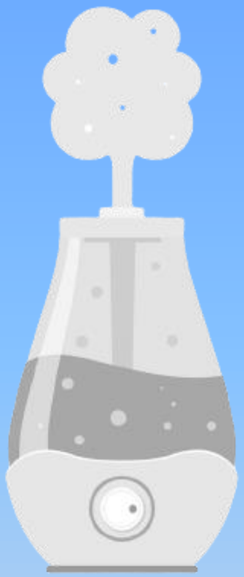






Introduction

Herbal Dosage Forms



- ❑ **Inhalations**

Fumigator

- ❑ **Topical**

  Poultice – Liniment – Rubs – Decoctions



- ❑ **Herbal baths**



Introduction

Undesirable Effects of Herbal Medicine

- ❑ **Mislabeling** {Method of use – Dose – Time}
- ❑ **Intentional unnatural toxic substance**
- ❑ **Natural toxic ingredient**
- ❑ **Excessive ingestion**



Fatigue



Mislabeling

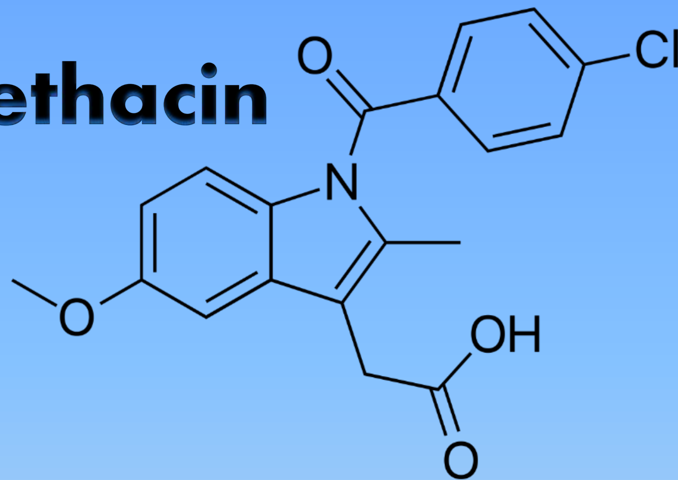


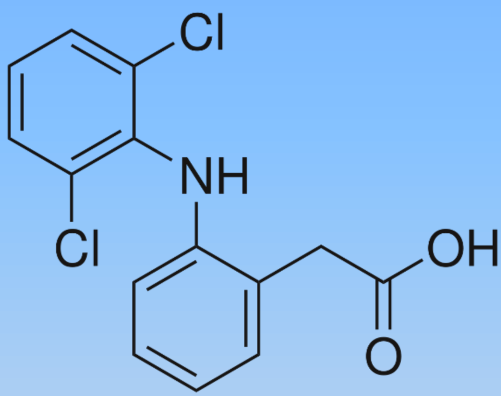
Check

{ Method of use – Dose – Time }

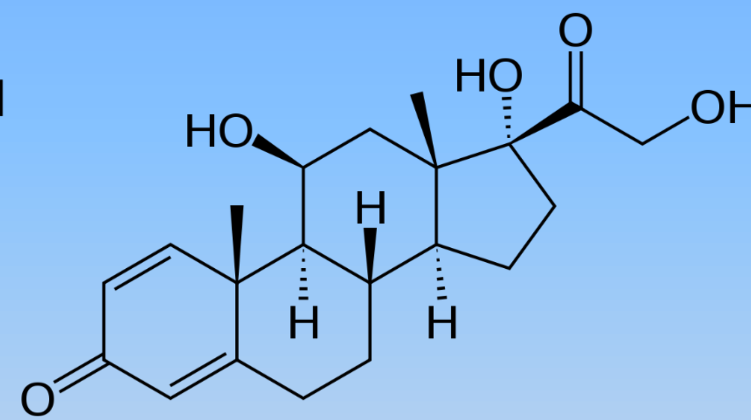
Unnatural toxic substance

Indomethacin





Diclofenac



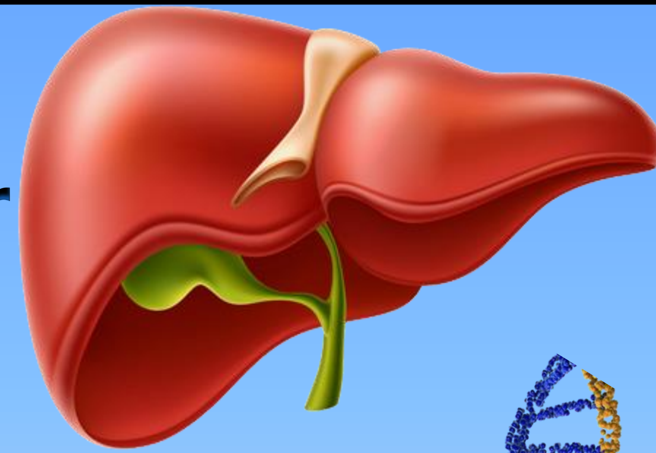
Prednisolone



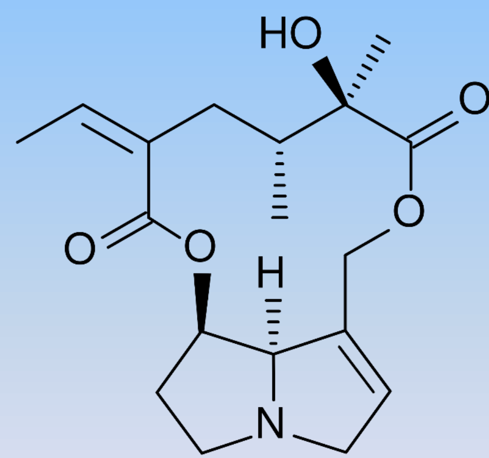
Pain relief capsules

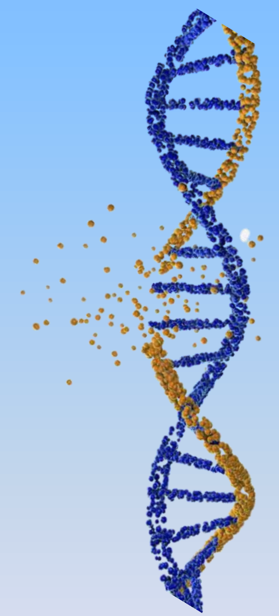
Normal toxic substance

Liver Tumor









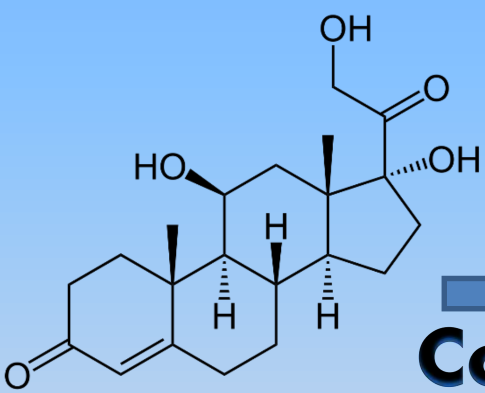
Tussilago Cough Herb

Pyrrolizidine Alkaloids

DNA Damage

Normal toxic substance

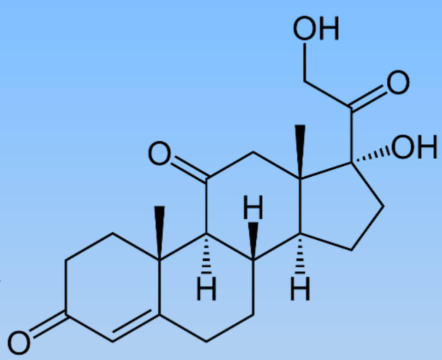
Licorice Oedema









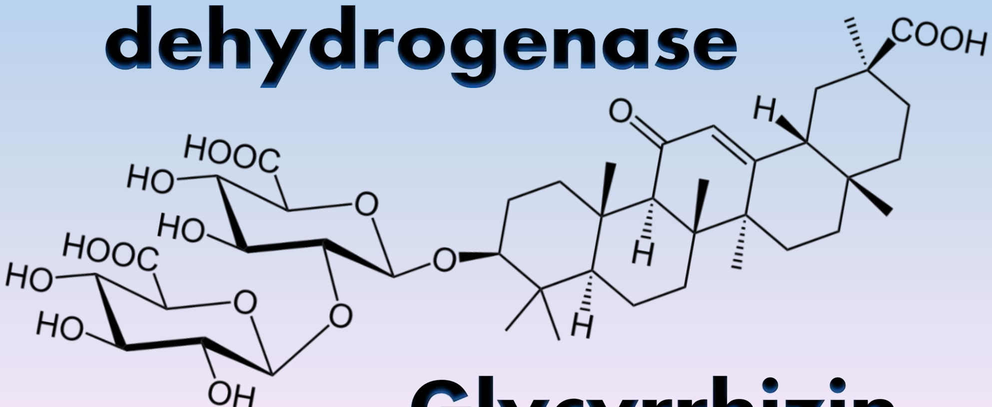


Cortisol

Corticosteroid 11-beta-dehydrogenase

Cortisone

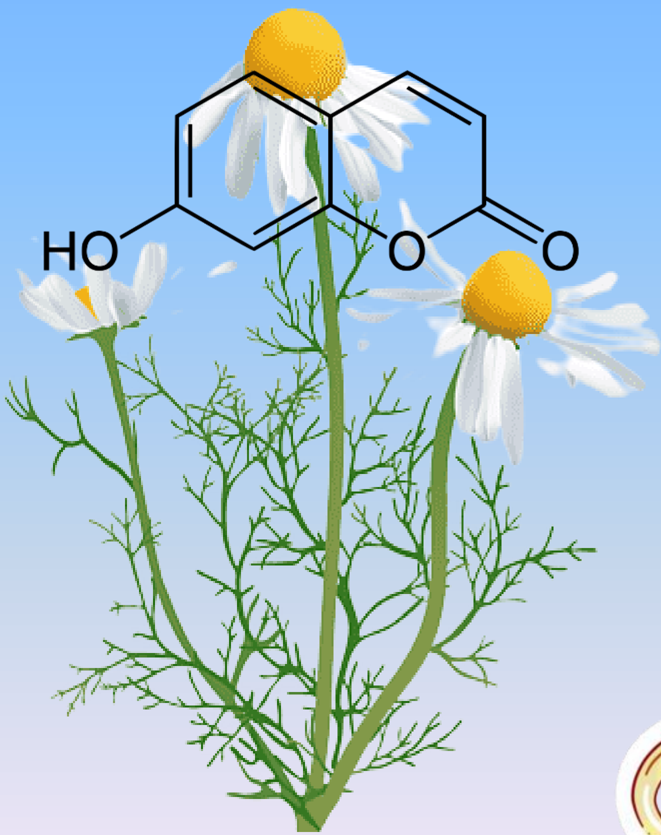
Water Retention



Glycyrrhizin

Chamomile

Chamomile Photosensetivity

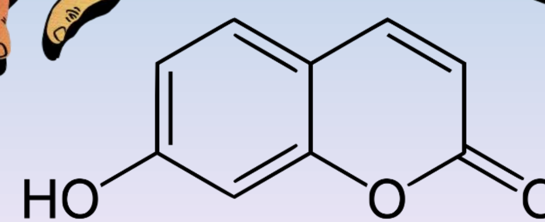












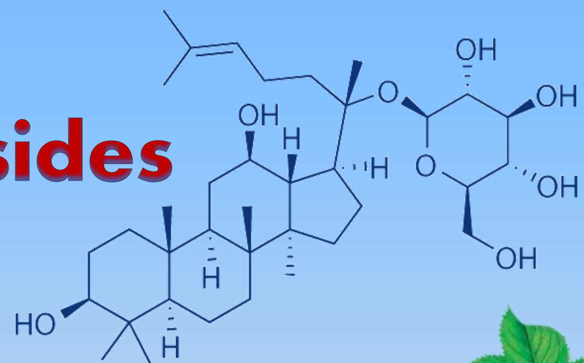
Chamomile

Umbelliferone

Ginseng

- Excessive ingestion of Ginseng Causes agitation, insomnia and hypertension due to ginsenosides.

Ginsenosides





Ginseng Root





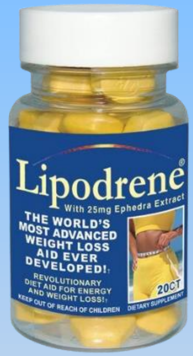
Insomnia

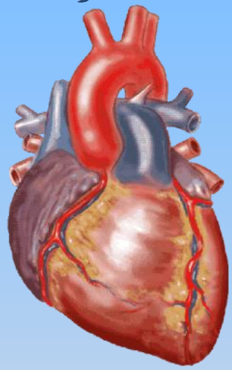
Brain MAO Inhibitory Activity

Introduction

Herbal Drug Interaction

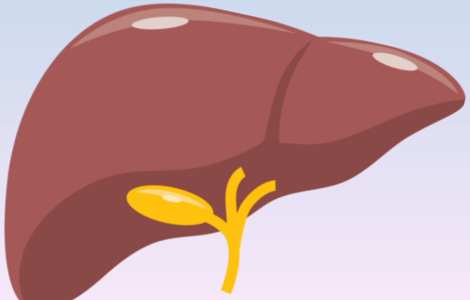
- ❑ **Pharmacodynamics {Qualitative}**
  - **Digoxin + Ephedra**
  - **St. John's wart + MAOI**
  - **Coumarins + Aspirin**

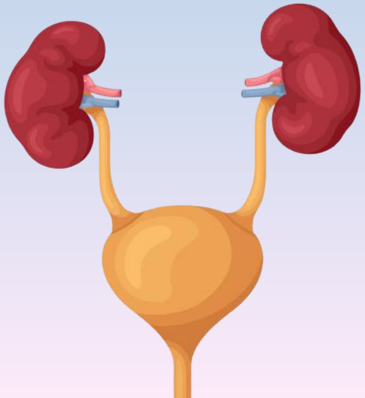




- ❑ **Pharmacokinetics ADME {Quantitative}**







Introduction

Rules for Herbal Administration

- ❑ **Between Meals**



- ❑ **Herbal Drug Interaction**

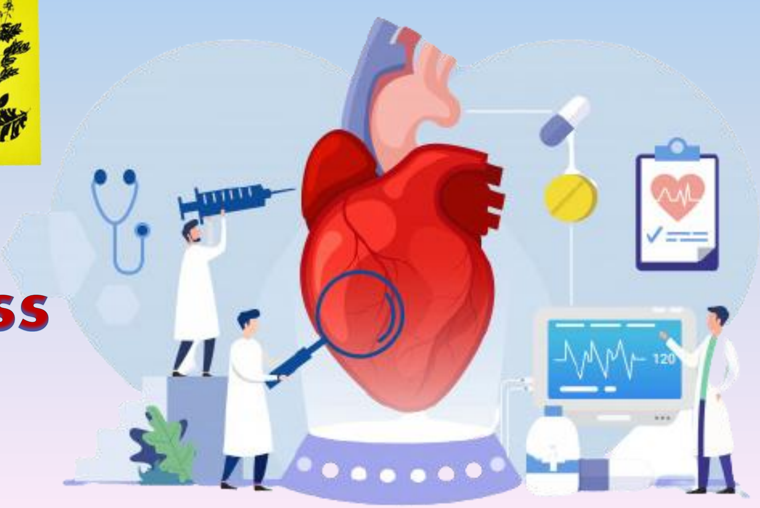


Digoxin



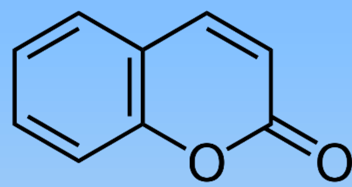


Senna
Mineral loss

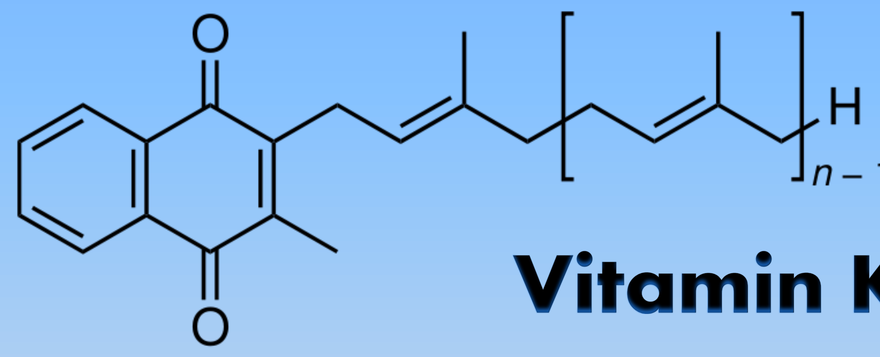


Herbal-Drug Interaction

- Coumarins in chamomile counteract Vit. K and synergize Aspirin leading to hemorrhage



Coumarin

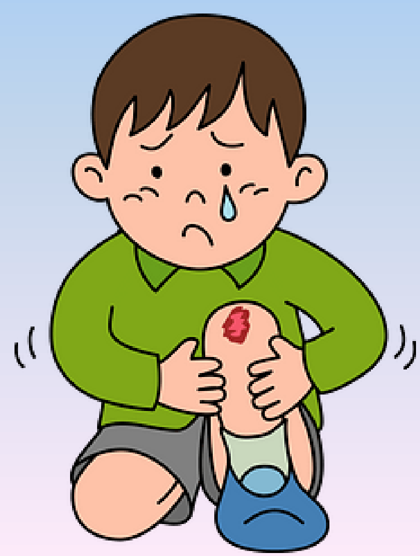


Vitamin K









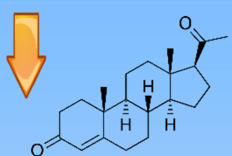


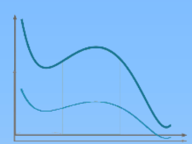
Herbal-Drug Interaction

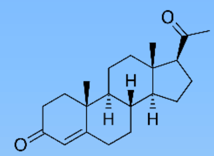
- ❑ **St. John’s wart activates CYP450**



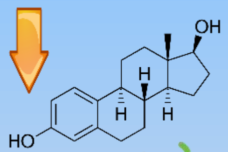
Decreases level of contraceptives



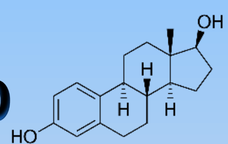


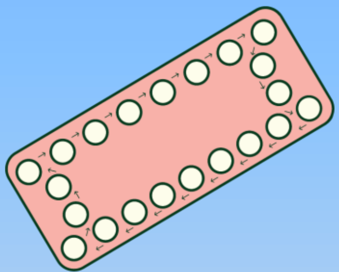


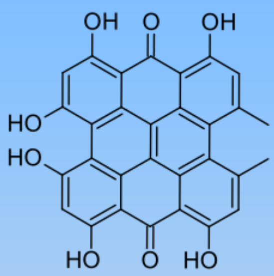
AUC



CYP450

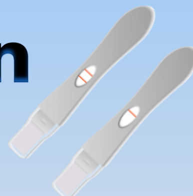


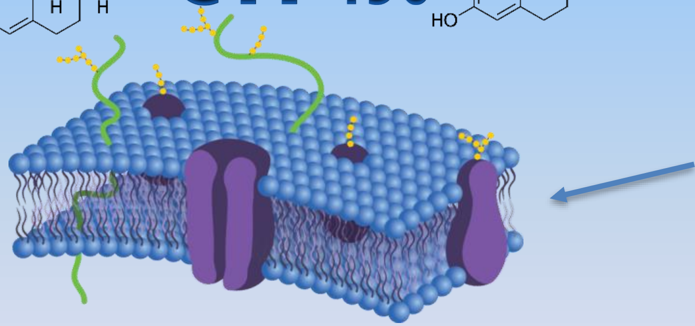




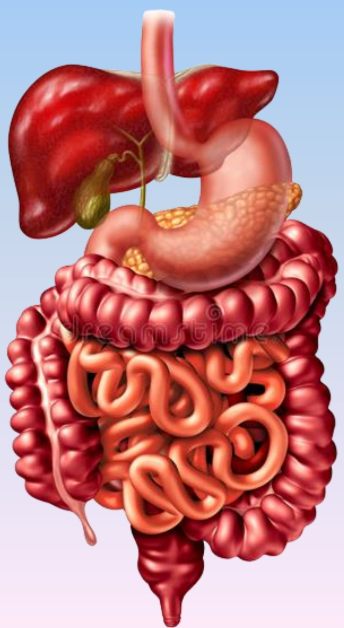


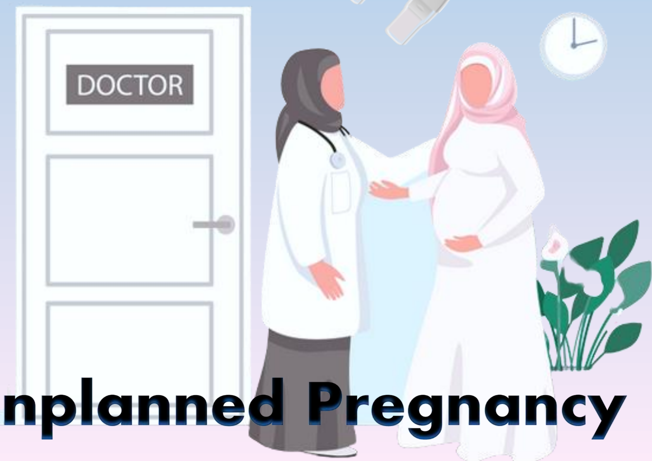
Hypericin





Activation



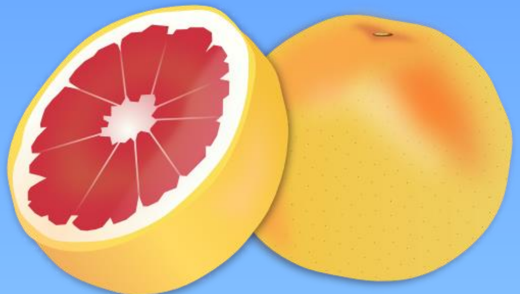


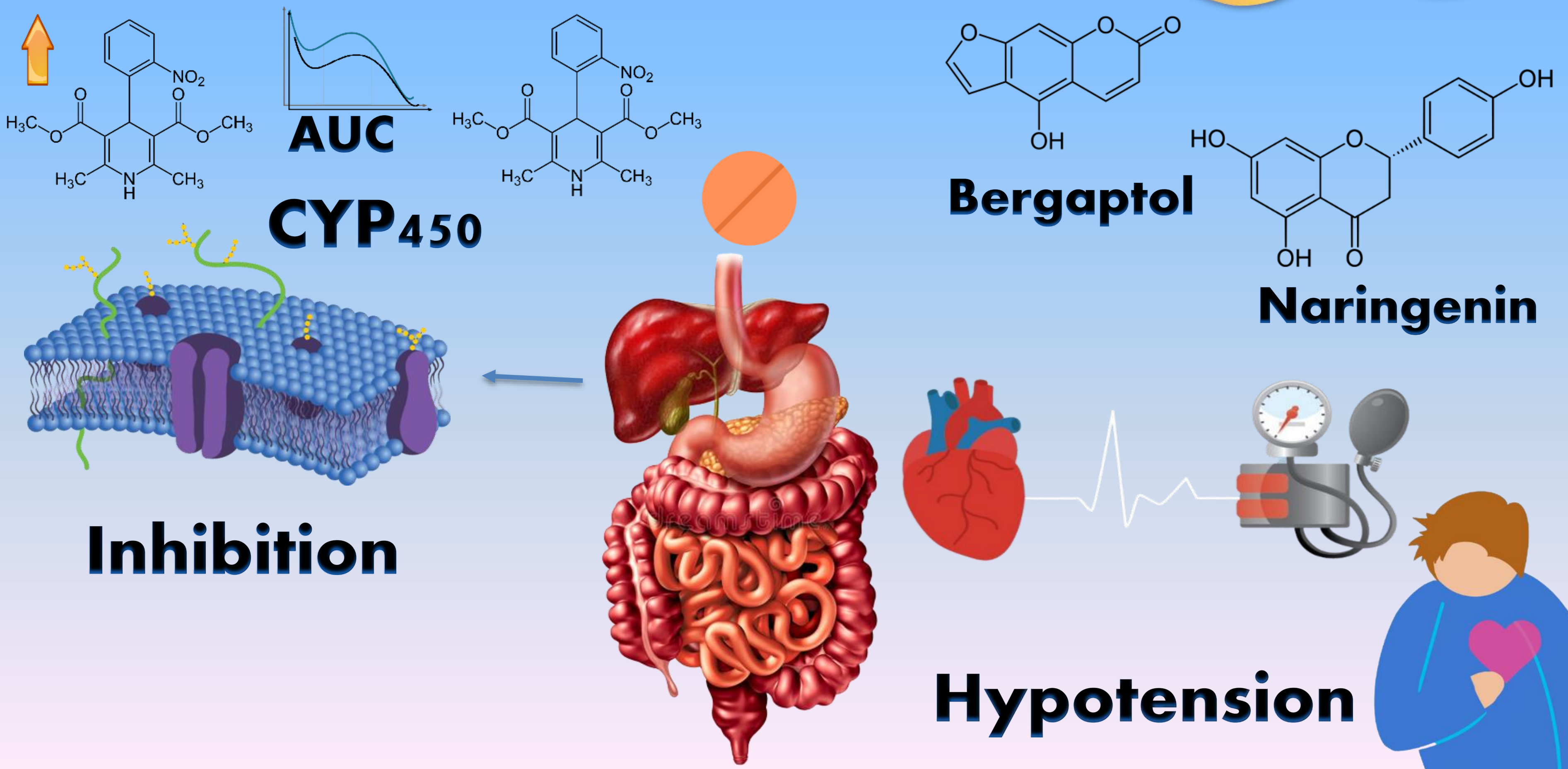
Unplanned Pregnancy

Herbal-Drug Interaction

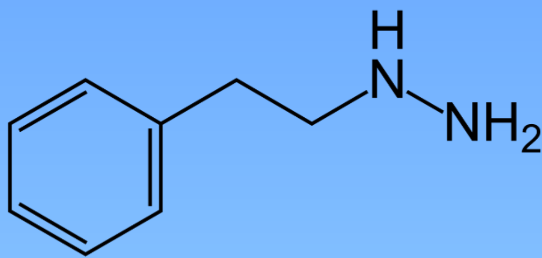
- ☐ **Grapefruit inhibits CYP450**

Increases level of nifedipine

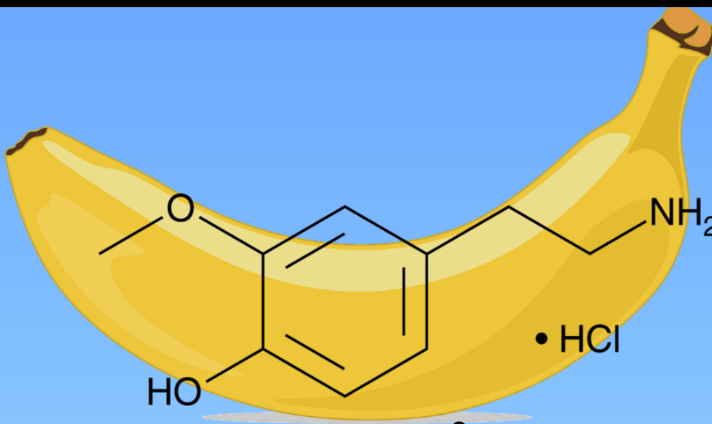




Drug food interaction



Phenelzine (Nardil)
Antidepressant



Tyramine





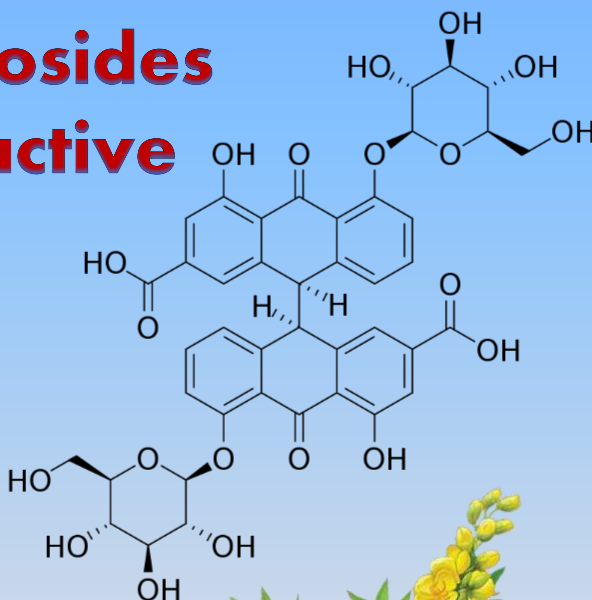
Hypertension crises

Introduction

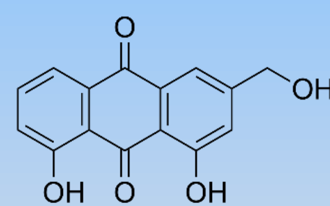
Why Using whole Herbal Extracts

- Synergism of different constituents

Sennosides
Bioactive

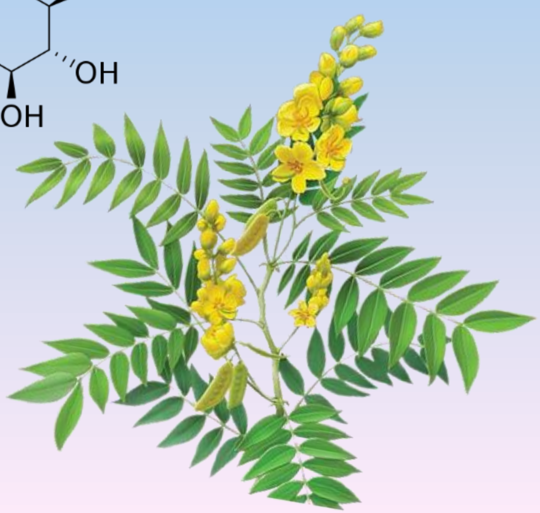


Aloe emodin
Inactive

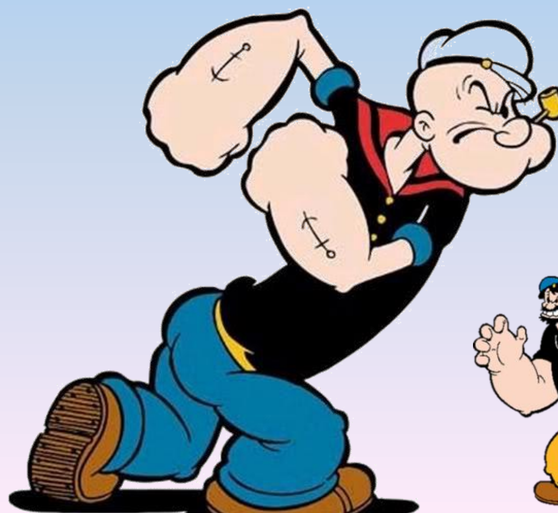










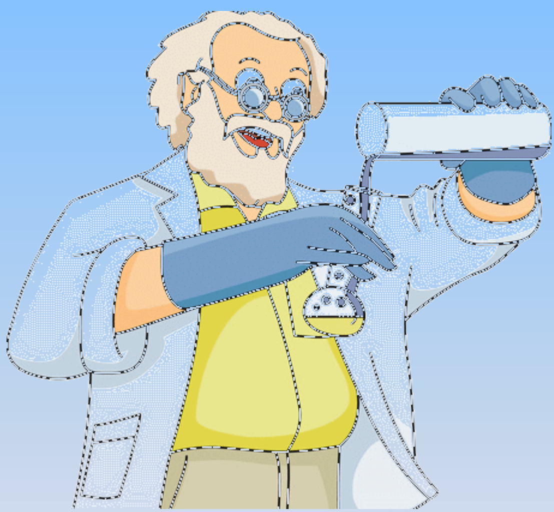


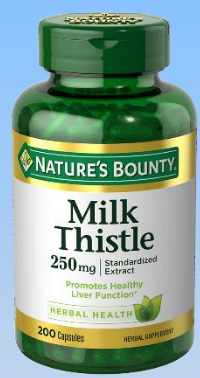


Introduction

❑ **Herbal drugs must be standardized {Know % active constituents} to assure**

Efficacy - Quality (purity) - Safety













Ascites

Standardization of Herbal Drugs

Chromatographic fingerprinting





